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ABSTRACT

This report summarizes data from three exploratory studies of Fordham University Library (New York) support for graduate education scholarship at Fordham. The first study assessed the spring 1990 course syllabi for inclusion and noninclusion of items on the bibliographies in the Fordham library system. Collection support for future course offerings was assessed by examining course proposal bibliographies for inclusion and noninclusion. A total of 2,555 citations were examined. Data are tabulated by type of publication (book, journal, and other), by publication date (pre-1986 and 1986-1990), by academic division within the Graduate School of Education, and by faculty grouping. Collection support for doctoral dissertation research was assessed by examining 1,331 citations from 15 dissertation bibliographies from May 1990 for inclusion and noninclusion. The third study focused on student information literacy needs. One hundred and sixty-one students from all three divisions within the Graduate School of Education responded to a self-report on their educational information literacy. A focus group of 74 of these respondents were given a variant questionnaire that surveyed the preferred methods of delivery of information literacy instruction. Based on these responses, library staff provided an array of new resources and instructional formats. The five appendices provide information about the library's resources, collection development guidelines from the School of Education, and a copy of the education information literacy self-report survey instrument given to students. (Includes 19 references.) (KRN)

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LIBRARY SUPPORT FOR GRADUATE EDUCATION RESEARCH AND TEACHING

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for

The Fordham University Libraries

and

The Graduate School of Education

FORDHAM UNIVERSITY, LINCOLN CENTER, NEW YORK, NY

FINAL REPORT

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FORDHAM UNIVERSITY LIBRARY SUPPORT FOR GRADUATE EDUCATION RESEARCH AND TEACHING

By Dr. Patricia Libutti, Education Librarian
Fordham University Library at Lincoln Center
April 1991

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1. INTRODUCTION

This report summarizes the data from a series of exploratory studies on Fordham University library support for Graduate Education scholarship at Fordham. The research on collection and instructional support, conducted by Dr. Patricia Libutti, Education Librarian at Fordham University Libraries, was done during 1989-1990 to provide an information base for library planning. Action plans to provide improved service to the Graduate School of Education are based on the available information and are outlined in each of the study areas.

The studies need to be seen in the context of existing administrative planning for library resources and services. Information from the Library Facilities Report, prepared by the Head Librarian, Lincoln Center (Anzul, 1989), and the Library Five Year Plan, prepared by the University Librarian (McCabe, 1990) are part of the basis for the studies contained in this report. Data from the Library Facilities Report, prepared for the 1990 NCATE visit, were extracted for a Library Resources and Services Summary Sheet (Appendix A, p. 19).

This report will extend awareness of specific library services with the following analyses:

1. Collection support for current course offerings in Graduate Education was assessed by examining Spring 1990 syllabi for inclusion/noninclusion of information sources in the Fordham library system. Collection support for future course offerings was assessed by examining course proposal bibliographies for inclusion/noninclusion in the library system.

2. Collection support for current doctoral dissertation research was assessed by examining May 1990 dissertation bibliographies for inclusion/noninclusion in the library system.

3. Instructional support for graduate students was examined through analysis of the responses of masters and doctoral level students (N = 161) to a Self-Report on Education Information Literacy.

2. COLLECTION SUPPORT FOR COURSE OFFERINGS

A. Book Inclusion/Noninclusion:

The Fordham University Library at Lincoln Center and the Gaines Library at Tarrytown are expected to support the course offerings offered by Graduate Education at each site. To assess the degree of support provided, the syllabi of the Spring 1990 semester, made available by the Dean's office, were examined for inclusion/noninclusion of items in the bibliographies. Table 1 (p.3) shows the distribution of Spring 1990 syllabi over the three divisions.

The total number of citations in the bibliographies was tallied and separated into two categories: (a) type of citation: books, journals, other and (b) publication date: pre-1986 or 1986-1990. This separation was done to provide an estimate of the logistics of retrospective ordering. The 1986-1990 citations were specifically examined for inclusion/noninclusion, because these would be most readily available through retrospective ordering. This methodology was suggested in a selective application of aspects of Brown's (1989) collection management and evaluation project at the University of Florida.

Table 2 (p.3) outlines the distribution of books in the syllabi by division and publication date. Seventy-six percent of the books listed were published prior to 1986; 24% were published between 1986 and 1990. Table 3 (p.4) outlines the data on the identified 1986-1990 books (N =700) by division and inclusion/noninclusion. Seventy-one percent of the books are in the Fordham Library system; 29% of the books are not.

Support for new courses offered by Graduate Education was assessed by examining the five new course proposals distributed during 1989-90 Faculty Council meetings. The total number of books (N = 299) contained in proposal bibliographies includes 76 published between 1986-1990 (25.4% of the total number of citations). These titles were examined for inclusion/noninclusion in the Fordham library system. Eighty-four percent of the citations can be found in the library system.

The assessed collection gap has been addressed by retrospective ordering of identified nonincluded books during Fall 1990. Another approach used to address the collection gap is the use of the computerized approval plan with Baker and Taylor, an acquisitions firm. The Education collection profile was modified in November 1990 to respond to the information available on current and anticipated course

Table 1

Courses Represented by Syllabi and Divisions

Syllabi	Division			N Courses
	APUE	C & T	PES	
Courses listed in '89-91 course catalog	76	134	103	313
Syllabi evaluated from Spring 1990	22	32	31	85
N Courses described by syllabi	17	19	24	60

Table 2

Publication Date of Books Listed on Spring 1990 Syllabi

Division	Date		Percentage		N
	Pre-1986	1986-1990	% Pre 1986	% 1986+	
APUE	1164	277	80.77	19.30	1441
C & T	773	278	73.55	26.45	1051
PES	332	145	69.70	30.40	477
N	2269	700	76.40	23.60	2969

Table 3

Inclusion/Noninclusion in Fordham Libraries Collection of Books Published Between 1986 and 1990 Listed in Spring 1990 Syllabi

Division	In Collection	Not in Collection	N
APUE	231	46	277
C & T	171	107	278
PES	94	51	145
N	496 (71% IC)	204 (29% NIC)	700

Table 4

Nonincluded Books Published Between 1986 and 1990 Listed on Spring 1990 Syllabi by New and Adjunct Faculty*

Division	New Faculty Books	Adjunct Faculty Books	N
APUE	22 (10.78% NIC)	3 (1.40% NIC)	25
C & T	29 (14.21% NIC)	67 (32.84% NIC)	96
PES	13 (31.37% NIC	17 (8.33% NIC)	30
N	64 (31.37% NIC)	87 (42.64% NIC)	151

* Syllabi of faculty other than new or adjunct accounted for 53 nonincluded books (25.98% NIC, 1986-1990).

examination of faculty research interests by ERIC searches.The acquisitions profile is summarized in the Library newsletter, Inside Fordham Libraries (1991,p.4).

The distribution of nonincluded books by faculty grouping (new, adjunct, other) is shown in Table 4 (p.4.) The nonincluded items were primarily from courses taught by either new or adjunct faculty. Both the infusion of new sources by new faculty and the lack of contact time by adjuncts may be explanations for the noninclusion of items. Content analyses of the nonincluded 1986-1990 citations revealed that interdisciplinary sources (books not ordinarily reviewed through publishers in Education nor acquired by a computerized approval plan in Education) account for a sizeable portion of the books. Specifically noted were the nonincluded books listed in courses in multicultural Education and arts in Education.

Library recommendations account for the majority of orders placed. Faculty orders amounted to 6.5% of the Education allocations expended between July and December 1990. Appendix B (p.20) presents the policy statement developed by the Head Librarian, Lincoln Center (1989), with respect to the responsibilities in the orderly acquisition of materials to support Graduate Education needs. The necessity for faculty recommendations, ordering, and material checking is crucial for a responsive collection. It is anticipated that the outlined approaches by the Library (approval-plan modification, retrospective ordering), together with faculty input, will close the collection gap and make the collection integrated with the curriculum.

B. Journal Inclusion/Noninclusion:

Table 5 (p. 6) outlines the journal citations in the Spring 1990 syllabi that are included/not included in the Fordham Library system. Included for analysis were both generic (name of journal only) and specific (complete article information) citations. The majority of journal citations (N = 286, representing 92 journals) can be located within the Fordham Library system. Interlibrary requests for photocopies can be used by faculty and students to supplement Fordham journal sources. Nonincluded journal sources (N = 28) form a list for consideration for inclusion by the library.

Journal citations for new course offerings were examined, resulting in the finding that out of 191 citations, 76.4% of the citations refer to journals in the Fordham Library system. Nonincluded journals (N= 18) form a listing for consideration for inclusion by the Library.

Table 5

Journal Inclusion/Noninclusion Listed in Spring 1990 Syllabi Reported by Division and Inclusion/Noninclusion in Fordham Libraries Collection

Division	N Generic Citations*	N Specific Citations*	N Journals in Collection	N Journals not in Collection
APUE	0	129	19	11
C & T	15	92	46	20
PES	10	65	26	7
N	25	286	92 (70.54% IC)	38 (29.46% NIC)

* Generic citation refers to listing of a journal title only; a specific citation contains full bibliographic information (journal title, author, date, volume, number, pages).

3. DOCTORAL DISSERTATION RESEARCH SUPPORT

The doctoral student needs a diverse and in-depth array of resources to meet research needs of originality and exhaustivity in research. The ACRL College Standards Committee's Standards for College Libraries (1986) provide a formula for quantitative assessment of collection support for doctoral-level research (Appendix C, p. 22). Fordham University Libraries provide for education-specific collection support, with approximately 64,400 volumes available in the Lincoln Center Library, and 18,500 volumes at the Tarrytown location (Anzul, 1989, p. 17).

Quantitative assessment of the adequacy of the collection to support specific current directions in doctoral research began with citation checking of 15 randomly selected May 1990 doctoral dissertation bibliographies. Books, journals, and other sources were specifically checked for inclusion/noninclusion in the Fordham Library system by a student trained by the Education Librarian in citation checking. The results were then evaluated to assess the need for interlibrary-loan services or visits to metropolitan area collections for source contact.

This method was adapted from Counelis's (1989) case study of 62 Graduate Education dissertations at the University of San Francisco. Table 6 (p.8)outlines the inclusion/noninclusion data by type of resource (books, journals, and other). Eighty-three percent of the book citations and 87.6% of the journal citations could be located within the Fordham University Libraries. Interlibrary-loan services or visits to on-site metropolitan area collections would provide the nonincluded items, with the exception of personal correspondence.

Counelis's 1989 study reported that 69.5% of the resources were available for the doctoral students, and that this figure was comparable with similar studies done over a 30-year period with different university library systems. In the present study of Fordham 1990 dissertation support, Fordham Libraries contained 80% of the citations, while 20% of the citations would have had to be obtained elsewhere by the doctoral student.

A total of 1,331 citations were examined in the bibliographies, with citations to books predominating (62%% of the 1331 examined citations). Journal citations accounted for 28% of the total citations,

Table 6

Doctoral Dissertation Bibliography Citation Analysis: May 1990 Dissertation Bibliographies (N= 15)

Format	N Citations found in Collection	N Citations not found in Collection	N & % Citations by Format
Books	685 (83.13%) In Collection	139 (16.86%) Not in Collection	824 (62.19%)
Journal	319 (87.64%) In Collection	45 (12.36%) Not in Collection	364 (27.27%)
Other*	55 (38.46%) In Collection	88 (61.54%) Not in Collection	143 (10.74%)
Total N	1065 (80.02% of Citations)	266 (19.98% of Citations)	1331 Citations

*Other includes ERIC documents, dissertations, government documents, conference papers, tests, newsletters, company reports, unpublished papers, and private correspondence. The verification of all Other citations was done by assessing if the item could be located in any of the Fordham University Libraries collections.

and other citations (ERIC and GPO documents, company reports, research reports, etc.) accounted for 10.74% of the total citations examined.

Fordham's data support the assumptions of collection adequacy for doctoral level research (breadth and depth). The issue of Library support services for obtaining information not in the collection for the doctoral student was explored through (a) an examination of 1990 interlibrary-loan services for Graduate Education students and (b) an inspection of professional search services requested by doctoral students in Education during 1989-1990.

Interlibrary loans for Graduate Education faculty and students during 1990 reflected a strong interest in dissertation examination (65 requests). Journal article requests (13) for photocopies of articles not available at Fordham form a listing of possible journals for acquisition by Fordham. It is of interest to note the support that Fordham has offered scholars in other universities: 81 Fordham Education dissertations were requested during 1990. Fifty-one dissertations requested from Fordham were produced during the last decade (1980-1989).

Doctoral students requested professional services from the Education Librarian for searches of databases that were both available (ERIC, Dissertation Abstracts) and not available (PSYCHinfo, Social Science Citation Index, Medline) in electronic versions in the library. During the period starting in January 1989 through December 1990,59 searches were done by the Education Librarian for identified doctoral students, with PSYCHinfo being the most frequently requested search base.

Actual information behaviors of doctoral students during the dissertation process are currently being examined in the qualitative analysis being done by Dr. Mary Kopala and the Education Librarian. This research has long range implications for both collection development and bibliographic instruction development, and will be applied accordingly by the Education Librarian.

4. BIBLIOGRAPHIC INSTRUCTION SUPPORT:INFORMATION LITERACY

The American Library Association Presidential Committee on Information Literacy (1989) defined an information literate person:

> . . . a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use

> effectively the needed information . . . . Ultimately, information literate people are those who have learned how to learn. They know how to learn because they know how knowledge is organized, how to find information, and how to use information in a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision.

Information literacy is considered to be a set of interrelated skills that are needed in today's society. Teacher certification requirements for four states include an information literacy provision (Wisconsin, Kansas, Washington, and Oregon). Other signs of visibility of this interest on the part of educators can be seen in new curricula which reflect this orientation (Chicago Board of Education, 1990; Laughlin, 1989). Library associations across the country are involved in outreach efforts that involve a wide range of innovations, as well as a retooling of traditional approaches (Breivek & Gee, 1989; Kulthau, in press; Report on the symposium on information literacy and education for the 21st century: toward an agenda for change, 1989).

Fordham University library staff have developed numerous approaches supporting the information literacy needs of graduate students in Education. Traditionally, the Education faculty have used the bibliographic instruction support service more than any other sector of the Fordham University community at Lincoln Center. A total of 31 bibliographic instruction sessions were held at Lincoln Center in Education during 1990.

The need for specific structure that would support the needs of Graduate School of Education students was assessed during the school year 1989-90 through analysis of responses to a Self-Report by students on Education Information Literacy (Appendix D, p. 23). Students from selected classes held from September 1989 through July 1990 were asked to respond to the questionnaire as a part of the class session. One hundred and sixty-one students (81 master's level , 80 doctoral level) from all three divisions provided the information base to examine the awareness of students of sources identified as essential for graduate scholarship by the Bibliographic Instruction for Educators Committee of the American College and Research Libraries (1981). These students represent 12% of the 1,348 students enrolled in Graduate Education (Fordham Department of Institutional Research, 1990). The results were then analyzed for awareness by category of resource (Basic Reference Sources, Current Awareness Sources, Searching Aids, and Special Collections), which are listed in Appendix D. Table 7 (p. 11) summarizes the data on information source awareness.

Table 7

Summary of Education Information Literacy Self-Reports of Master's and Doctoral Level Students (N=161)

Category of Resource*	Use Report: Student Level Master's (N= 81)	Doctoral (N=80)
Basic Reference Sources (N=17)	8.79% (121/1377)	15.81% (215/1360)
Current Awareness Sources (N =16)	23.53% (305/1296)	26.48% (339/1280)
Search Aids: Thesauri (N=2)	12.34% (20/162)	34.37% (55/160)
Special Collections(N=2)	3% (5/162)	6% (9/160)

* A list of each item in each category can be found in Appendix D.

The students did not respond uniformly to questions about age, gender, prior experience, or credits taken. Fifty-two percent of the total masters students (N = 81) reported their age as between 20-29. The second largest age group in the master's level was between 40-49, with 30% of the group so indicating that age. Doctoral students most frequently reported age as between 40-49 (33.33% of N doctoral), with the second most frequently reported age bracket being 20-29 (20%). Thirty-three percent of the doctoral students reported having taken more than 45 credits in education; 14% of the master's level students reported the same education credit experience.

Both master's and doctoral level students reported using metropolitan area libraries other than Fordham as part of their educational experience (77% and 79%, respectively). A listing of the other libraries reported as being currently used is in Appendix E, p. 28. Library orientation (or bibliographic instruction session) experience was reported, with 78% of the master's level students and 60% of the doctoral level students reporting no prior library session. Students reporting having had an orientation were informally questioned during the ongoing session; prior experience did not include advanced training or electronic database search strategies.

The data on Resource Use were calculated by comparing the total possible responses for each instructional group (master's level, doctoral level) on each item with the actual responses. The responses for each item were then reported as percentages of reported use of a categorical grouping of resources (Basic Reference Sources, Current Awareness, Searching Aids, and Special Collections, as listed in Appendix D, p. 23). The possible and actual reponses are included for each category and instructional group in Table 7, p. 11.

Specific Basic Reference Sources had more reported use than others at both master's and doctoral levels. The sources within this category that had relatively higher use reports include: Review of Research in Education, Mental Measurements Yearbook, Handbook of Research in Teaching, and The Encyclopedia of Educational Research . Current Awareness sources that had reported relative higher use reports included Psychological Abstracts, Education Index, Current Index to Journals in Education, Bibliographic Index (doctoral), and the New York Times Index. The listing of sources and summary of reported use for items by each instructional group is presented in in Appendix D, p. 23.

Doctoral students reported more awareness of Search Aids than masters students, which would be expected. The lack of contact with

Special Collections (Tests, Curriculum Guides) is noteworthy. Much library effort is expended in the maintenance of these collections, yet little contact is seen.

The development of information literacy presumes the awareness of systematic search strategies. This search strategy development is particularly important at the doctoral level, in which the demands of the dissertation process include the literature review. The characteristics of the search process for doctoral students include the determinations of originality of topic and an exhaustivity of literature review on the topic. Both these search characteristics demand systematic search strategies using the wide array of information sources available. Although the results of this exploratory study need to be interpreted cautiously, the low use of Basic Reference Sources, as well as the reported use of Search Aids, warrant attention.

Instructional strategies that are systematically utilized by Library staff and faculty would increase information literacy development at both levels of graduate education. The literature on bibliographic instruction at the graduate level in Education includes teacher preparation considerations (Jacobson, 1988) and applications at the Catholic University at differentiated graduate levels (Pickert& Chwalek,1984). The diversity of undergraduate preparation that Madland (1989) reported is echoed in the responses by Fordham students at both master's and doctoral levels. Particularly noteworthy is the prevailing response across both groups about prior library instruction: a minority of students at either instructional level have had such instruction, either at Fordham or at another institution.

A recent dissertation (Zaporozhetz, 1987) examined faculty perceptions of their preparation of doctoral candidates for the literature review component of the dissertation. The qualitative analysis of University of Oregon faculty in the Graduate School of Education included several directions for faculty-library partnership in the process. Faculty perception of the most relevant resources for student literature reviews, as rank ordered in this dissertation, warrant attention. The currency of many topics in Education dissertations require an active awareness of research fronts (Fulton, 1987) and the ability to utilize both print and electronic resources to stay actively involved with evolving topics.

At this time, there is no sequential plan of bibliographic instruction in place at the Fordham University Library in partnership with the Graduate School of Education that addresses the differing information needs of master's level and doctoral level students. These

differentiated needs are anticipated in application statements for master's and doctoral students, forthcoming from the Bibliographic Instruction for Educators Committee in their Information Retrieval and Analysis Skills document (EBSS, ACRL, 1991.)

A Focus Group (N=74, 46 master's level,26 doctoral level students) was formed by providing a subset of the 161 students with a variant form of the questionnaire, which included specific questions about prior experience with electronic resources, use of Library-offered opportunites, and preferred methods of instructional delivery of information literacy instruction. The use of Library-offered opportunites was uneven: master's level and doctoral level students differed in their use of offered bibliographies, tutorials, or pathfinders. Ten percent of the masters students in the Focus Group reported taking tutorials or bibliographies; 35% of the doctoral students took the Education library literature. Ten percent of the masters students reported taking the offered Electronic Library sessions, whereas 53% of the doctoral students in the Focus Group reported taking such sessions.

The preferences for delivery methods indicated that such options are desirable to students. The responses to preferences were rank-ordered by the students, with 1= most preferred, and 4= least preferred. The relative rankings were: Small Group (1.87), Whole-Class Sessions (2.13), Tutorial for Electronic Sources (2.69) , and Self-Guided (2.97.) Using these data, the Fordham University Library at Lincoln Center provided an array of instructional services for the Education graduate student during 1989-1990. The following resources were developed during 1989-1991:

1. Pathfinders in Education: both general pathfinders and specific listings in topic areas were made available to students. General pathfinders include:(a) Psychological Services in Education, (b) Administration, Policy, and Urban Education, and (c) Curriculum and Teaching, as well as (d) a generic Education pathfinder.Specific pathfinders included:(a) Curriculum Guide Collections, (b) Children's Literature, (c) Bilingual Education Resources, and (d) Instructional Material Selection.

2. Self-instructional Tutorials were developed for the online MPALS ERIC system and the new online system for Fordham Library Books. Course-specific tutorials which utilized faculty input were developed for topical exploration by students. They included tutorials on ERIC searching on the following topics: (a) funding sources, (b) social psychology, (c) science education, (d) bilingual education, (e) gifted and talented students, (f) minority leadership, (g) vocational

education, (h) educational reform, (i) school psychology, and (j) homogeneous vs. heterogeneous grouping. Reprints of the resources were then made available for other students by inclusion in the Library Literature rack.

3. Signs at each online search station were developed in collaboration with PSGE 6565 students enrolled in the Spring 1990 course on New Media and Instructional Design, taught by the Education Librarian. The Spring 1991 PSGE 6565 students have critiqued screen displays for the MPALS system, have examined each CD-ROM work station for instructional considerations, and are developing the plans for a videotape segment for searching the Dissertations Abstracts International database. The latter product will be the basis of future outreach efforts to Tarrytown ELP doctoral students, who were given an introductory literature review session by the Education Librarian at Tarrytown in March 1991.

The following formats for instructional sessions were initiated for exploration of effectiveness:

1. New Student Orientation formats were developed for both master's and doctoral levels, and were an effort at a differentiated curriculum in information literacy. Following review of the Education Literacy Self-Reports, the sessions were designed to provide introductions in view of differing prior experiences and future information needs. All students were introduced to the conceptual frameworks of Publication Sequence as part of systematic literature searching; Boolean Search Strategy for electronic database searching, and provided with an awareness of Fordham's collections, locations, and services. Hands-on experiences with electronic resources, with peer feedback and collaboration on the search assignments concluded the sessions. Students were provided with pathfinders relevant to their division.

2. Advanced Student Strategy Sessions proceeded from collaboration with faculty on course assignments, and were planned as an extension of introductory experiences. Such applications included publication trend analysis methods, utilizing the ERIC system. Tutorials were provided for advanced level application; peers worked in small groups to explore the advanced search options in ERIC.

3. A Doctoral Residency Seminar, given in November, 1990, provided advanced literature search frameworks for the students through a demonstration of literature searching on doctoral student's dissertation process by the Education Librarian. The Research Front model (Fulton, 1987) was applied during the lecture. Follow-up opportunities, library

resources for exhaustive literature searching, and database resources were included in the session.

4. Electronic Library sessions were offered during Fall and Spring, 1990. The half-hour sessions were utilized by 76 Education students, approximately 6% of those enrolled. The Fordham University Library is expanding its electronic resource capacities during 1991 by including new databases. The awareness of both search strategy and database scope is essential for Education students, and will be incorporated in new bibliographic sessions, offered in future Electronic Library electives (INFOLAB, planned for Fall 1991). Students will be able to sign up for specific small group experiences with databases relevant to their search needs. These sessions will include the specific assistance seen in Feedback to the Library, in the Education Information Literacy Self-Report. The comments (64) included requests for training with time-saving with mechanics (downloading), as well as an understanding of the scope of the databases.

Future bibliographic instruction sessions will incorporate an evaluation component, to provide data on the effectiveness of planned instruction on student performance. Faculty direction in such planning would orient library service toward effective instructional design for the student. The full utilization of new resources will change the way students do scholarly work. Such a direction has significance for student development of literature searching capacity, and needs to be developed with faculty collaboration. The Library intends to be at the front for service to students and faculty with the major influx of new opportunities for effective information work now in place at Fordham, and welcomes partnership with Education faculty.

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REFERENCES

ACRL College Library Standards Committee. (1986). Standards for college libraries, 1986. College and Research Libraries News, 47 (3), 189-200.

American Library Association Presidential Committee on Information Literacy. (1989). Final report of the American Library Association Presidential Committee on Information Literacy. Chicago, IL: American Library Association. Available from the American Library Association, 50 E. Huron Avenue, Chicago, IL, 60611.

Anzul, C. (1989). Library facilities report. Unpublished manuscript: Fordham University Libraries, New York.

Bibliographic Instruction for Educators Committee of the Association of College and Research Libraries. (1981). Bibliographic competencies for education students. College and Research Libraries News, 47 (3), 189-200.

Breivek, P., & Gee, G. (1989). Information literacy: Revolution in the library. New York: Macmillan.

Brown, M. (1989). Librarian accountability for the collection: The collection management evaluation process at the Education Library, University of Florida. Education Libraries, 14 (3), 39-41.

Chicago Board of Education. (1990). Project INFORM. Unpublished manuscript. Department of Information Processing Services, Chicago Public Schools, 1819 W. Pershing Road, 5W, Chicago, IL,60609.

Counelis, J. (1989). The university library and the doctoral dissertation in professional education: A case study. San Francisco, CA: University of California, Department of Education. (ERIC Document Reproduction Service: ED 305 090).

Fulton, T. (1987, May). From idea to publication to seminal work: Integrating the concept of research fronts into library instruction for graduate students. Paper presented at the 15th Annual LOEX Library Instruction Conference, Ohio State University, Columbus, OH.

Inside Fordham Libraries. (1991). Unpublished manuscript, Fordham University Libraries, New York.

Jacobsen, F. Teachers and library awareness: Using bibliographic instruction in teacher preparation programs. Reference Services Review, 4, 51-54.

Kulthau, C. (In press). Bringing up an information literate generation: Dynamic roles for school and public libraries. In J. Varlegs, (Ed.) Proceedings from the 28th Annual Symposium, School of communication, Information, and Library Studies,

Rutgers University. North Carolina: McFarland.

Laughlin, M., and others. (1989). From information to decision making: New Challenges for effective citizenship. Bulletin No. 83, National Council for Social Studies. (ERIC Document Reproduction Service, No. ED 310 956).

Madland, D. (1989). Library instruction for graduate students. College Teaching, 33 (4),163-164.

McCabe, J. (1990). Library five year plan. Unpublished manuscript. Fordham University Libraries, New York.

Pickert, S., & Chwalek, A. (1984). Integrating bibliographic research skills into a graduate program in education. Catholic Library World, 55 (9), 392-394.

Rambler, L. (1982). Syllabus study: Key to a responsive academic Library. The Journal of Academic Librarianship, 8 (3),155-159.

Report on the symposium on information literacy and education for the 21st Century: Toward an agenda for change. (1989). Cambridge, MA: Endispute, Inc.

Zaporozhetz, L. (1987). The dissertation literature review: How faculty advisors prepare their doctoral candidates . University of Oregon, doctoral dissertation. (ERIC Docoument Reproduction Service, No. ED 303 131).

APPENDIX A

SUMMARY SHEET: FORDHAM UNIVERSITY LIBRARIES RESOURCES AND SERVICES FOR THE GRADUATE SCHOOL OF EDUCATION

PROFESSIONAL STAFF: LINCOLN CENTER: 6 (Includes 1 Education Bibliographer)
TARRYTOWN: 6 (Includes 1 Reference)

TOTAL NUMBER OF EDUCATION VOLUMES:
LINCOLN CENTER: 64,405 TARRYTOWN: 18,490

TOTAL NUMBER OF SERIALS
EDUCATION At Lincoln Center: 525 At Tarrytown: 81
PSYCHOLOGY At Lincoln Center: 216 At Tarrytown: 40

BUDGET, LINCOLN CENTER ACQUISITIONS: $368,000 (244,00, BOOKS; $100,000, PERIDICALS
EDUCATION ACQUISITIONS, 1990-91:
LINCOLN CENTER $35,500 TARRYTOWN $19,000
PERIODICAL SUBSCRIPTIONS, EDUCATION, LINCOLN CENTER: $23,878

ELECTRONIC RESOURCES: ON-LINE DATABASES AND CD-ROM DATABASES
LINCOLN CENTER: Online: DRA (Fordham University Libraries, made available March 25, 1991)
MPALS (Westchester County consortium, including Fordham, ERIC database available.
First used at Fordham in February, 1989. Includes ERIC Online, 1966-present, GPO catalog.)
CD-ROMS: Dissertation Abstracts International, Infotrac, Disclosure, MLA Bibliography,
(Psychinfo available Summer 1991)

TARRYTOWN: Online: same as Lincoln Center.

INTERLIBRARY LOAN STATISTICS, EDUCATION, 1990:
REQUESTS FOR PHOTOCOPIES, JOURNAL ARTICLES: 13
REQUESTS FOR DISSERTATIONS: 65

RESOURCE SUPPORT: FAX machines at all Fordham Universities Libraries sites for inter and intralibrary loan requests.
METRO CARD made available for metropolitan area library use to students.
MICROFORM MACHINES: LINCOLN CENTER: 6 Microfilm, 3 Microfiche
PHOTOCOPY MACHINES: LINCOLN CENTER: 7
DIALOG Searches available for students and faculty.
INSTRUCTIONAL SUPPORT, EDUCATION:
BIBLIOGRAPHIC INSTRUCTION SESSIONS, 1990: 31 Classes (held at Lincoln Center)
SMALL GROUP ELECTRONIC LIBRARY SESSIONS, 1989-90: 76 Sessions
SELF INSTRUCTIONAL MATERIAL DEVELOPMENT, EDUCATION:
Bibliographies: Division specific: 3
Pathfinders, topical: 12 prepared for specific classes)
Database search tutorials: 2
Tutorial material, point of use signage: 2 (at online stations)

USE OF LIBRARY RESOURCES BY GRADUATE SCHOOL OF EDUCATION JULY 1989-JULY 1990
Total circulation 36,206 Books
Circulation, Education: 6,178 (17%)
Reserves, Education: 216 Volumes, L class(Education) on Reserve Lists
116 Volumes, BF class (Psychology) on reserve Lists.
272 reprints, periodicals, Education reserve Lists.

Reserves, Usage statistics: Education 5,722 (21.3% of total Reserve usage statistics.)

BEST COPY AVAILABLE

APPENDIX B

GUIDELINES FOR BOOK RECOMMENDATIONS FROM GRADUATE EDUCATION FACULTY

Development of education resources in the Library is the joint responsibility of the faculty and the Library's education bibliographer. Obviously, the Library will benefit from faculty expertise in a given subject area or areas, from faculty research, and from faculty familiarity with professional journals and reviews. The education bibliographer is in a better position to assess gaps or imbalances in current book ordering or in the collection, Library-user demand for specific material, and to provide for retrospective collection development related to Graduate Education programs. Please observe the following general guidelines when submitting book order recommendations; the guidelines are designed to insure the orderly development of eduation collections at Lincoln Center and at Tarrytown:

1. Reserve materials: Materials intended for reserve during a given semester, and not already in the collection, should be ordered on a RUSH basis. The word "rush" should be plainly indicated in the special instructions box (lower right-hand corner) on the blue order recommendation form. Please bear in mind that, although Rush orders are given top priority by our Acquisitions Department, a minimum of four weeks may be required before the book is on hand and ready for use. This means that Rush reserve orders should be submitted at least one month before the beginning of a semester. The Library's reserve policy is that no more than twenty items should be placed on reserve for a given course; also, a ratio of one copy of a book per twenty-five students has been found to be sufficient. A general bibliography for a given course, from which students have a choice of readings, should never be regarded as a substitute for a reserve list.

2. New Course Offerings: Faculty are responsible for ordering materials not already in the collection to support new course offerings. This will involve checking bibliographies for such courses against the Library's holdings (a process that has been vastly simplified by the Library's new online catalog), by the concerned faculty member, and submitting blue order recommendations marked No. 1 (see below) for items not included in the Library's holdings.

3. Prioritizing Blue Order Recommendations Forms. All order recommendations from Education faculty should be submitted on blue order recommendation forms (typewritten lists or checkmarked publishers' catalogs or brochures are not acceptable). Faculty should use a priority system when submitting these forms, as follows:

a. Priority no. 1: Books needed for specific course offerings should be so designated in the special instructions box in the lower right-hand corner of the blue order recommendation form. This will insure that the books are ordered ahead of other recommendations.

b. Priority no. 2: To be used for order recommendations that faculty members know (from reviews, their own research or experience) will be very useful in the collection to support Graduate Education programs.

c. Priority no. 3: To be used for order recommemdations in re books that would be somewhat useful to add to the collection, the Graduate Education Library budget permitting.

4. Tarrytown Orders: Faculty should not automatically mark any order recommendation "LC and TT." The book budget for Tarrytown is considerably smaller than the one for Lincoln Center, and the Gaines Library has only limited space for Fordham collections. All Tarrytown orders should be submitted with specific course offerings or programs in mind (priorities no. 1 or no. 2 above).

5. Multiple copies of books: Faculty should avoid ordering multiple copies of books unless this is absolutely necessary. The grim fact is that the stacks devoted to the Education collection are already overcrowded, and the Library as a whole will run out of space in another two or so years.

Many aspects of acquisition have to be considered in an age of tight budgets and the "Information Explosion." If faculty believe that a specific area of the Fordham collection needs more depth, currency, or expansion, they should call Dr. Patricia Libutti to discuss this perception. A plan can then be developed to examine the subject area systematically for possible additional acquisitions. A similar procedure is especially important in the case of new Education programs. The Library's Education subject specialist brings to her tasks exceptional qualifications, and faculty members should avail themselves of this expertise.

Mr. Clement Anzul
Head Librarian
May 10, 1989

APPENDIX C
American College and Research Library Asociation's Standards for College Libraries
Formula for Quantitative Assessment of Research Collections

FORMULA A—

1. Basic collection	85,000 vols.
2. Allowance per FTE faculty member	100 vols.
3. Allowance per FTE student	15 vols.
4. Allowance per undergraduate major or minor field*	350 vols.
5. Allowance per master's field, when no higher degree is offered in the field*	6,000 vols.
6. Allowance per master's field, when a high degree is offered in the field*	3,000 vols.
7. Allowance per 6th year specialist degree field*	6,000 vols.
8. Allowance per doctoral field*	25,000 vols.

A "volume" is defined as a physical unit of a work which has been printed or otherwise reproduced, typewritten, or handwritten, contained in one binding or portfolio, hardbound or paperbound, which has been catalogued, classified, or otherwise prepared for use. Microform holdings should be converted to volume-equivalents, whether by actual count or by an averaging formula which considers each reel of microfilm, or ten pieces of any other microform, as one volume-equivalent.

*For example of List of Fields, see Gerald S. Malitz, *A Classification of Instructional Programs*. Washington, D.C.: National Center for Education Statistics, 1981.

Source: ACRL College Standards Committee. (1986). Standards for college libraries, 1986. College and Research Libraries News, 47, 3, page 192.

APPENDIX D

EDUCATION INFORMATION LITERACY SELF REPORT

This survey, part of an ongoing needs assessment of Education students, is designed to provide the Library with information about your experience and needs with respect to information search strategies. The results are used to design class sessions, tutorials, and bibliographies to meet your needs. The demographic information is also used to gain an understanding of the characteristics of the graduate student population at Fordham.

Please take the time to consider each question. I am looking forward to working with you to help you in your search!

Dr. Patricia Libutti,
Education Reference Librarian

*=QUESTIONS ASKED OF FOCUS GROUP ONLY; REST ASKED OF ALL STUDENTS

Please fill in the following:
Age____ # credits: grad. education:___

Division: (Circle one) C&T PES APUE Gender: (Circle) M F

I am at this stage of my own research:

initial Master's __ Master's, over 12 credits ___

Masters, over 24 credits__ initial Doctoral ___ Doctoral,

mid-course requirement ___ Residency___ Dissertation proposal___

Beginning dissertation:___ Other:_____

*I am working in the professional field in which I am studying:
Y N If "Yes", in what capacity?

I have used other academic libraries before. Y N

If "yes", please list which academic libraries you are PRESENTLY USING:_____

I have visited specialized collections: (curriculum guides, test collections, etc.) Y N (If "Yes", which collections?

I have had a Library Orientation or Library Bibliographic Instruction session in this library. Y N

If "Yes", as a part of what course?_____
*I have taken the Electronic Library sessions Y N

*I have taken the bibliographic guides or tutorials in this library. Y N

I have learned about education information sources in graduate classes. Y N (If yes, which courses involved learning about education information sources?)_____
_____

_____

*My experience with electronic sources for information searching: (check as many as apply:)

__have used the Library on-line catalog

__have used the ERIC system in this Library

___have used on-line Catalogs elsewhere:

___public libraries
___ other academic libraries

___have used CD-ROM databases (if checked, which one(s))
_____

___have had a computer search done for me by a searcher (librarian or other professional searcher) (If checked, what was your topic? _____How satisfied were you with the results?_____)

___do my own computer searching on my PC

___can download results

___use a word processor program

___can reformat citations with a computer program

___can use Boolean search strategy with databases

___Other:_____

SURVEY OF STUDENT CONTACT WITH SPECIFIC RESOURCES

Listed below are education information references and indexes, as well as key sources for education information which you may have used in prior work. Please indicate: which of these sources you have USED BEFORE (place a check beside the source).

(BASIC REFERENCE SOURCES:)

ENCYCLOPEDIAS,YEARBOOKS, RESEARCH REVIEWS

Encyclopedia of education	*M
Encyclopedia of educational research	**D, *M
International encyclopedia of education	____
International encyclopedia of the social sciences	____
Review of research in education	***D, *M
Standard education almanac	____
Digest of education statistics	____
Yearbook of the National Society for the Study of Education	____
Condition of education	____
Directory of unpublished experimental mental measures	____
Handbook of research on teaching	*D
Mental measurements yearbook	***D, *M
Research on motivation in education	____
APA Directory	____
Directory of American scholars	____
Cabell's directory of publishing opportunities in education	____
Directory of associations	____

*I would prefer to learn about library resources by: (rank order your preferences:)

__using self-guided Library Tour booklets or subject area bibliographic guides

__a Bibliographic Instruction session to examine search strategies for specific topics (whole class, part of course)

__meeting in a small group of peers to have a training session on the Electronic Library

__using a tutorial for the Electronic sources

__other:_____

For feedback to the Library (session design, services to be provided): I WOULD LIKE TO SEE:

THANK YOU!

*= QUESTIONS ASKED OF FOCUS GROUP: ELECTRONIC RESOURCE EXPERIENCE, PREFERRED MODE OF INSTRUCTIONAL DELIVERY, AND USE OF LIBRARY SELF-INSTRUCTIONAL MATERIALS AND OPPORTUNITIES.

KEY TO RESPONSE CODE, SURVEY OF STUDENT CONTACT WITH SPECIFIC RESOURCES

***D= More than 40 responses, Doctoral
***M= More than 40 responses, Master's

**D= 25-39 responses, Doctoral
**M= 25 to 39 responses, Master's

*D= 15-24 responses, Doctoral
*M= 15-24 responses, Master's

(CURRENT AWARENESS RESOURCES:)

ABSTRACT SERVICES, INDEXES

Administration abstracts	____
Bibliographic index	**D, *M
Bibliographic guide to education	*D
Dissertation abstracts international	**D
Masters theses in education	____
Monthly catalog of United States publications	____
Social sciences index	*D
PAIS bulletin	____
Psychological abstracts	***D, **M
Sociological abstracts	____
Education index	**D
Current index to journals in education(CIJE)	***D, *M
Resources in education (RIE)	*D
State education journal index	____
Social sciences citation index	____
Current contents	____
New York Times index	**D, **M

(SEARCH AIDS:)

THESAURUS

Thesaurus of ERIC descriptors	**D
Thesaurus of psychological indexing terms	*D

(SPECIAL COLLECTIONS:)

Tests in microfiche	____
Kraus curriculum guides (in microfiche) (ASCD)	____

*I would prefer to learn about library resources by: (rank order your preferences:)

__using self-guided Library Tour booklets or subject area bibliographic guides

__a Bibliographic Instruction session to examine search strategies for specific topics (whole class, part of course)

__meeting in a small group of peers to have a training session on the Electronic Library

__using a tutorial for the Electronic sources

__other:_____

For feedback to the Library (session design, services to be provided): I WOULD LIKE TO SEE:

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Appendix E: Libraries Reported by Graduate School of Education Students as Used as Part of Their Information Searching

COLLEGE OF NEW ROCHELLE	MID-MANHATTAN EDUCATION ANNEX
UNIVERSITY OF CONNECTICUT	COLUMBIA UNIVERSITY**
YALE	N.Y.U.**
STONY BROOK	KEAN COLLEGE
HUNTER*	BOCES
ST. THOMAS AQUINAS	NEW YORK PUBLIC LIBRARY***
ACADEMY OF MEDICINE	NEW YORK MEDICAL
SOUTHAMPTON COLLEGE	PACE PLEASANTVILLE*
BROOKLYN COLLEGE	JOHN JAY
ADELPHI	WHITE PLAINS PUBLIC
MERCY COLLEGE	FAIRLEIGH DICKENSON, TEANECK*
ST. ELIZABETH COLLEGE	MANHATTANVILLE
MORRIS COUNTY COLLEGE	C.W. POST
IONA	NEW YORK RESEARCH LIBRARY*
DOMINICAN	ROCKLAND COMMUNITY COLLEGE
LSU	SUNY FREDONIA
BANK STREET	TEACHER'S COLLEGE**
TRENTON STATE	SETON HALL
ST. JOSEPH'S (BROOKLYN)	RUTGERS*
ST. JOHN'S	BARNARD
KING'S COLLEGE	CITY COLLEGE (CUNY)*
SCHOMBERG	MT. VERNON
COLLEGE OF STATEN ISLAND	QUEENS COLLEGE
DREW	MONTCLAIR STATE COLLEGE

**** = MORE THAN 20 RESPONSES, ** = 15-19 RESPONSES, * 10-14 RESPONSES*